

REMARKS

Status

Claims 1, 3-15, 18, 19, and 27-31 are pending in the present application. Independent claims 1, 27, and 29 have been amended. Support for the amendments can be found throughout the specification, and in particular in paragraphs [0006]-[0015], [0026], and [0099]-[0101] of the present application, as published in U.S. Patent Application No. 2005/0052630.

Rejection Under 35 USC 103(a)

Claims 1, 3-15, 18, 19, and 27-31 stand rejected under 35 USC 103(a) over U.S. Patent No. 6,451,002 (“Dev”) in view of U.S. Patent Application No. 2002/0010415 (“Simon”). Applicant respectfully traverses.

MPEP § 2143 provides that to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest **all the claim limitations**. The cited references, alone or in combination, fail to teach or suggest all the claim limitations.

Dev discloses a method for electrotherapy, including an electrode assembly that includes a plurality of needles inserted into tissue of a patient. An electrical signal is applied to the electrodes that is proportional to the distance between the electrodes (Dev, col. 2, ll. 28-55). In addition, Simon discloses a system for assessing the performance of a pharmaceutical delivery system. A pair of electrodes is applied to a portion of a body, and a pharmaceutical agent is infused into the portion of the body. The electrical response of the portion of the body is measured along with the biological response to the pharmaceutical agent to assess the performance of the pharmaceutical delivery system (Simon, Abstract).

However, Applicant respectfully submits that Dev and Simon, alone or in combination, fail to teach or suggest an electroporation device able to expose tissue adjacent to needle electrodes to a substantially constant current independent of any resistance change

in the selected tissue during the electrical pulse, as taught by claim 1 as amended.

Independent claims 27 and 29 have been amended to recite similar, though not identical, features.

Applicant respectfully submits that Dev at most teaches applying a constant voltage to tissue (Dev, col. 7, ll. 62-65), and not substantially constant current independent of any resistance change in the selected tissue during the electrical pulse as claimed. On Page 2 of the Office Action, the Patent Office states that the constant voltage taught by Dev is equivalent to applying a constant current where the resistance of the tissue remained constant because of Ohm's Law. Accordingly, Applicant has amended the independent claims to clarify that the constant current is independent of any resistance change of the selected tissue during an electrical pulse. Ohm's law teaches that if voltage is constant and the resistance is changed, then the current must change. Thus, the system of Dev with a constant voltage could not possibly teach or suggest a substantially constant current independent of any resistance change in the selected tissue during the electrical pulse as claimed.

Simon fails to cure the deficiencies of Dev. Simon teaches a signal amplifier that applies an electric signal to electrodes in a series of pulses (Simon, paragraph [0062]). The signal amplifier receives a feedback signal in response to the electrical signal that measures the level of voltage that is applied, and uses the feedback to achieve an average voltage or average current through the tissue during treatment (Simon, paragraph [0063]). Applicant respectfully submits that Simon at most teaches maintaining an average current or voltage over the entire treatment, and not maintaining substantially constant current independent of any resistance change in the selected tissue during an electrical pulse, as claimed. There is no teaching or suggestion that the signal amplifier of Simon could possibly use the feedback signal to maintain a constant current during an electrical pulse. In addition, the use of the term "average current" in Simon implies that the current may vary during pulses, rather than remaining substantially constant independent of any resistance change in the selected tissue during the electrical pulse.

Independent claim 29 teaches similar features as claim 1. Applicant therefore respectfully requests that the Examiner withdraw the rejection and allow claims 1 and 29.

With respect to dependent claim 3, Applicant respectfully submits that Simon and Dev also fail to teach or suggest an impedance tester in electrical communication with the plurality of needle electrodes. The Examiner cites paragraph [0063] of Simon as teaching such a feature. Applicant respectfully disagrees. The cited portion of Simon at most teaches that an allowable upper limit of current is established so that in the event that the electrodes are not in electrical connection with one another damage can be prevented from any rapid increase in current that may result. Applicant respectfully submits that the cited portion of Simon does not teach measuring impedance at all, but rather current. There is simply no teaching or suggestion of an impedance tester in electrical communication with the plurality of needle electrodes anywhere in Simon.

Applicant therefore respectfully submits that claim 3 is allowable over the Dev and Simon references for the foregoing reasons as well as its dependency on claim 1; and requests the withdrawal of the rejection and allowance of claim 3.

Claims 4-15, 18, and 19 are dependent on independent claim 1, and claims 30 and 31 are dependent on independent claim 29, and are therefore allowable for at least the reasons given above for claims 1 and 29. Applicant respectfully requests that the Examiner withdraw the rejections and allow claims 4-15, 18, 19, 30, and 31.

With respect to independent claim 27, Applicant respectfully submits that the Dev and Simon references entirely fail to teach or suggest a controller that is capable of managing the electroporation device to expose the selected tissue to a substantially constant current independent of any resistance change in the selected tissue during the electrical pulse, and measuring the resistance of the plurality of needle electrodes to determine if a circuit can safely be established through the selected tissue. As described above with respect to independent claim 1 and dependent claim 3, neither Dev nor Simon, alone or in combination, teaches or suggests such features. Applicant therefore respectfully requests that the Examiner withdraw the rejection and allow claim 27, and all claims dependent therefrom including claim 28.

DOCKET NO.: AVSI-0010P1
Application No.: 10/657,725
Office Action Dated: April 19, 2010

PATENT

In conclusion, Applicant submits that all pending claims are in condition for allowance and request an early indication of the same. Should the Examiner have any questions that may be addressed through a teleconference, the Examiner is invited to contact the undersigned attorney.

Date: August 13, 2010

/Thomas S. Kim/
Thomas S. Kim
Registration No. 51,009

VGX Pharmaceuticals, LLC
1787 Sentry Parkway West
Building 18, Suite 400
Blue Bell, PA 19422
Telephone: (267) 440-4203
Facsimile: (267) 440-4242